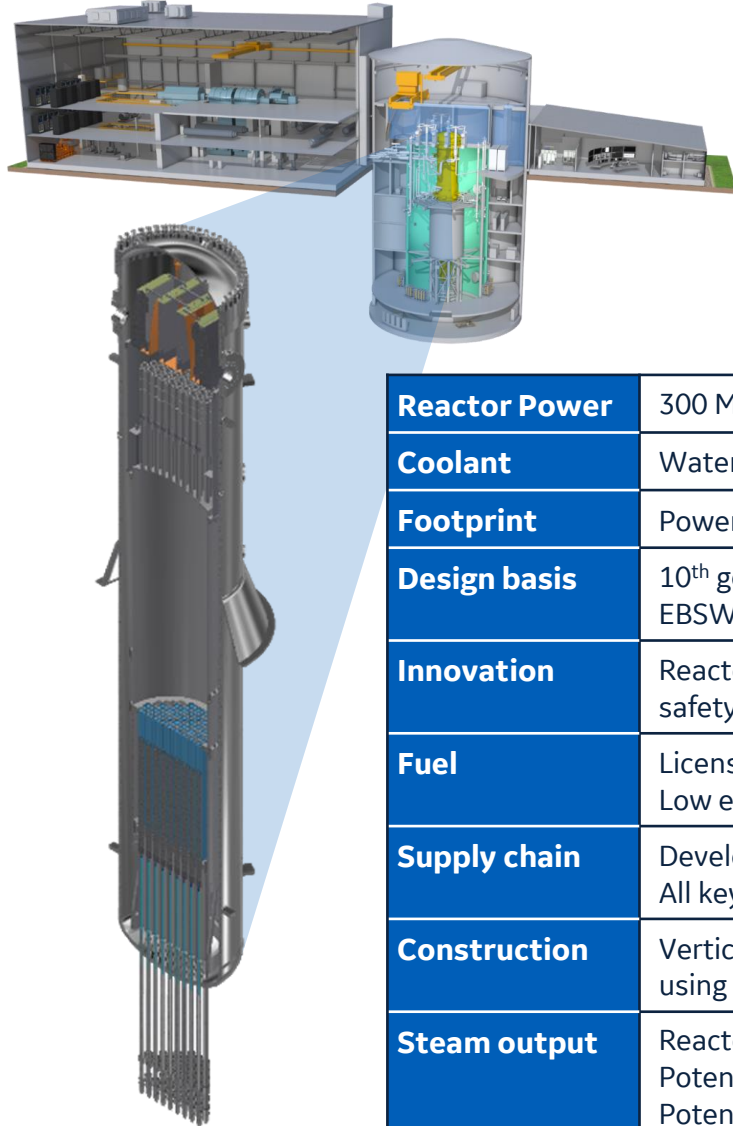


GE Hitachi Nuclear Energy - BWRX-300



Deployment updates -

- ~\$400MM technical collaboration agreement between GEH, OPG, TVA, and Synthos Green Energy to advance design
- Submitted License to Construct for OPG Darlington project in Canada ... could be completed as early as 2028
- TVA is preparing a construction permit application for a BWRX-300 at the Clinch River Site
- Orlen Synthos Green Energy announced ambitious plans to deploy as many as 76 small modular reactor units in Poland

Reactor Power	300 MWe (net) / 870 MWt
Coolant	Water
Footprint	Power block: 430'x200' (131m x 61m) Protected area: 6.7 acres
Design basis	10 th generation Boiling Water Reactor ... Based on NRC-licensed EBSWR and fully tested passive safety systems
Innovation	Reactor isolation mitigates large break LOCA ... enabling dramatic safety system and building volume reduction
Fuel	Licensed fuel operating in reactors today ... 25k bundles delivered Low enrichment ... utilizes existing US fuel supply chain
Supply chain	Developing Canadian, USA and European supply chains All key components previously manufactured
Construction	Vertical shaft construction eliminates 1M cubic yards of backfill ... using proven construction and modularization techniques
Steam output	Reactor outlet: 545 °F (285 °C) Potential patent-pending heat pump output: 590-842 °F (310-450 °C) Potential H2 boiler output: ~1292 °F (700 °C)

Competitive 24/7 electricity and steam

- District heating
- Process steam and electrification
- Oil Sands extraction
- Data centers
- CO₂ Direct Air Capture
- Clean steel

Hydrogen and synthetic fuels:

- ~120 °C optimal for H₂ and Direct Air Capture (DAC) of CO₂ ... cost of steam and electricity are principal drivers
- Next generation SOEC and DAC could enable cost-competitive H₂ and eFuels ... IRA offers significant incentives for both SMR and H₂/CO₂ production credits
- Carbon-negative synthetic feedstocks for petrochemicals and fertilizer
- Ammonia and methanol offer compelling H₂ carriers and fuels